TITLE V APPLICATION REVIEW

Project #: 970064
Deemed Complete: 2/6/97

Engineer: Brian Johnson
Date: 12/3/97

Facility Number: C-447
Facility Name: E and J Gallo Winery
Mailing Address: PO Box 1130
Modesto, CA 95353

Contact Name: Sue Gornick
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Responsible Official: John T. Stout
Title: Plant Manager

I. PROPOSAL

E and J Gallo Winery is proposing that an initial Title V permit be issued for its existing production facility in Fresno, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

II. FACILITY LOCATION

E and J Gallo Winery is located at 5610 E Olive Avenue in Fresno, CA.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A. A summary of the exempt equipment categories which describe the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

This facility consists of seven permitted units. Permits to Operate C-447-1-0, 2-1, 3-0, 4-0, 5-0, 6-0, 8-0, and 9-0; Authorities to Construct 3030140101, 104, 105, and 106, which were issued by the Fresno County APCD; and Authorities to Construct C-447-7-0 and 9-0 which were issued by the District (see Attachment C).

IV. MODEL GENERAL PERMIT TEMPLATE USAGE

The applicant is requesting to use the following model general permit templates:

A. Template SJV-UM-0-0 - Facility-Wide Umbrella

The applicant has submitted TQF SJV-UM-0-0 for the Title V facility wide umbrella permit conditions (C-447-0-1). The TQF has been properly signed and dated, and is valid for all Title V sources.

B. Template SJV-BSG-4-0 - Series 4 Boilers, Steam Generators, and Process Heaters

The applicant submitted TQF SJV-BSG-4-0 for each of the small boiler permits (C-447-1-1, 3-1, and 4-1). The applicant is eligible to use this template because each of these boilers is located east of Interstate 5 in Fresno County; has a maximum design heat input rating between 10 and 100 MMBtu/hr; is permitted to fire on PUC-regulated natural gas only; is currently in compliance with the NO_x emission limits in Section 5.1 of District Rule 4305; and has not been constructed, modified, or reconstructed after June 9, 1989, as defined in 40 CFR 60.40c(a).

The District has reviewed the applicant's submittal and determined the applicability of this template to be proper.

C. Template SJV-GS-2-0 - Series 2 Gasoline Transfer

The applicant submitted TQF SJV-GS-2-0 for permit C-447-9-0. The applicant is eligible to use this template because the equipment is a gasoline storage tank with a capactiy greater than 250 gallons and is served by a phase I vapor recovery system.

V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA and public review:

Conditions 1 through 39 of the facility wide requirements (C-447-0-1)

Conditions 1 through 19 of the requirements for permit units C-447-1-1, 3-1, and 4-1

Conditions 1 through 12 of the requirements for permit unit C-447-9-1.

VI. APPLICABLE REQUIREMENTS ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES

District Rule 1100 - Equipment Breakdown[1] (Last Amended 12/17/92)

District Rule 1160 - Emission Statements [1] (Adopted 11/18/92)

District Rule 2010 - Permits Required [1] (Last Amended 12/17/92)

District Rule 2020 - Exemptions [1] (Last Amended 12/21/94)

District Rule 2031 - Transfer of Permits [1] (Last Amended 12/17/92)

District Rule 2040 - Applications [1] (Last Amended 12/17/92)

District Rule 2070 - Standards for Granting Applications [1] (Last Amended 12/17/92)

District Rule 2080 - Conditional Approval [1] (Last Amended 12/17/92)

District Rule 2520 - Federally Mandated Operating Permits, Sections 5.2, 9.5.1, 9.5.2, 9.6.1, 9.6.2, 9.8, 9.9.1, 9.9.2, 9.9.3, 9.9.4, 9.9.5, 9.10, 9.13.1, 9.14.1, 9.14.2, 9.17, and 10.0 [1] (Adopted 06/15/95)

District Rule 4101 - Visible Emissions [1] (Last Amended 12/17/92)

District Rule 4601 - Architectural Coatings [1] (Last Amended 12/17/92)

District Rule 8020, 8030, and 8060 - Fugitive Dust (PM_{10}) Emissions [1] (Last Amended 4/25/96)

[1] Model General Permit Template SJV-UM-0-0 addressed these requirements for facility wide requirements (C-447-0-1)

40 CFR Part 82 - Subpart F, Stratospheric Ozone [1]

40 CFR Part 61 - Subpart M, National Emission Standard for Asbestos [1]

County Rule 108.1 - Source Sampling [2]

County Rule 407 - Sulfur Compounds [2]

District Rule 2520, 9.4.2 and 9.5.2 - Periodic Monitoring and Recordkeeping [2]

District Rule 4201 - Particulate Matter Concentration [2]

District Rule 4301 - Fuel Burning Equipment [2]

40 CFR 60.40 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [2]

40 CFR 72.6 (b) - Acid Rain Provisions [2]

District Rule 1081 - Source Sampling [2]

District Rule 4305 Sec. 4.2, 5.1, 5.4, 6.1.1, 6.2 (excepting 6.2.3), 6.3, 8.1 - Boilers, Steam Generators, and Process Heaters [2]

District Rule 4351 Sec 4.2, 5.2.2, 6.1.1, 6.2 (excepting 6.2.3), 8.1 - Boilers, Steam Generators, and Process Heaters - Reasonably Available Control Technology [2]

District Rule 4621 - Transfer of Gasoline into Stationary Storage Containers, Delivery Vessels, and Bulk Plants[3]

District Rule 4622 - Transfer of Gasoline into Vehicle Fuel Tanks[3]

District Rule 4623 - Storage of Organic Liquids[3]

VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES

District Rule 1081 - Source Sampling (Last Amended 12/16/93)

[2] Model General Permit Template SJV-BSG-4-0 addressed these requirements for permit units C-447-1-1, 3-1, and 4-1
[3] Model General Permit Template SJV-GS-2-0 addressed these requirements for permit unit C-447-9-1

District New and Modified Stationary Source Review Rule

District Rule 2520 - Federally Mandated Operating Permits, Section 9.4.2 (Adopted 6/15/95)

District Rule 4201 - Particulate Matter Concentration (Amended 12/17/92)

District Rule 4202 - Particulate Matter - Emission Rate (Amended 12/17/92)

District Rule 4301 - Fuel Burning Equipment (Amended 12/17/92)

District Rule 4305, Sections 4.2, 5.1, 5.4, 6.1.1, 6.2 (except 6.2.3), 6.3, and 8.1; Boilers, Steam Generators, and Process Heaters (Last Amended 12/19/96)

District Rule 4351, Sections 4.2, 5.2.2, 6.1.1, 6.2 (except 6.2.3), and 8.1; Boilers, Steam Generators, and Process Heaters - Reasonably Available Control Technology (Last Amended 10/19/95)

District Rule 4801 - Sulfur Compounds (Amended 12/17/92)

40 CFR 60.40b, Subpart Db--Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (12/16/87)

40 CFR 68, Chemical Accident Prevention Provisions (1/31/94)

VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as Federally Enforceable Through Title V Permit.

For this facility, conditions 2 and 3 of C-447-5-1, C-447-6-1, and C-447-8-1 are not Federally Enforceable through Title V.

IX. COMPLIANCE

A. Requirements Addressed by Model General Permit Templates

1. Facility Wide Requirements (C-447-0-1)

The applicant is proposing to use a general permit template to address federally applicable facility-wide requirements. Section IV of template SJV-UM-0-0 includes a demonstration of compliance for all applicable requirements. Template conditions have been added to the facility wide requirements (C-447-0-1) as condition numbers 1 through 39 to ensure compliance with these requirements.

2. Small Boilers (C-447-1-1, 3-1, and 4-1)

The applicant is proposing to use general permit templates to address federally applicable requirements for the three small boilers (C-447-1-0, 3-0, and 4-0). Section IV of template SJV-BSG-4-0 includes a demonstration of compliance for applicable requirements. Template conditions have been added to the requirements for permit units C-447-1-1, 3-1, and 4-1 as condition numbers 1 through 19 to ensure compliance with these requirements. Conditions which do not apply to these boilers, because the boilers are permitted to burn natural gas exclusively, will be annotated as inapplicable.

3. Gasoline Storage Tank (C-447-9-1)

The applicant is proposing to use general permit templates to address federally applicable requirements for a gasoline storage tank (C-447-9-0). Section IV of template SJV-GS-2-0 includes a demonstration of compliance for applicable requirements. Template conditions have been added to the requirements for permit unit C-447-9-1 as condition numbers 1 through 12 to ensure compliance with these requirements.

B. Requirements Not Addressed by Model General Permit Templates

1. New and Modified Stationary Source Review Rule (NSR)

a. Low NO_x Natural Gas Boilers (C-447-1-0, 3-0, and 4-0)

Permit units C-447-1-0, 3-0, and 4-0 were subject to the NSR Rule at the time the applicant applied for an Authority to

Construct (ATC) these units. ATC #3030140101, 3030140105, and 3030140106 were issued by the FCAPCD on August 20, 1991.

- Condition 1 from each ATC is not included because it is included in the current equipment description.
- Condition 2 from each ATC is included as permit condition 20 of the requirements for permit units C-447-1-1, 3-1, and 4-1.
- Condition 3 from each ATC is not included because it only applied before and directly after the modification.
- Condition 4 from each ATC is included as permit condition 5 of the requirements for permit units C-447-1-1, 3-1, and 4-1.
- Condition 5 from each ATC is included as permit condition 5 of the requirements for permit units C-447-1-1, 3-1, and 4-1.
- Condition 6 from each ATC is included as permit condition 5 of the requirements for permit units C-447-1-1, 3-1, and 4-1.
- Condition 7 from each ATC is included and reworded to reflect the current NSR requirement (see PTO Condition 8) as permit conditions 3 and 23 of the requirements for permit units C-447-1-1, 3-1, and 4-1.
- Condition 8 from each ATC was not included because it was only preconstruction requirement.

Certain NSR conditions have been updated by the subsequent Permit to Operate (PTO). These are addressed as follows:

- Condition 8 of each PTO alters the NSR requirements established by condition 7 of each ATC. Specifically, condition 8 of the PTO more clearly specifies the NOx and CO emission limitations. Therefore, condition 8 of each PTO is included as conditions 3 and 23 of the requirements for permit units C-447-1-1, C-447-3-1 and C-447-4-1.
- Condition 9 of each PTO specifies the daily emission limitations (DEL) that were not defined on the original ATC. Therefore, condition 9 of each PTO is included as condition 24 of the requirements for permit units C-447-1-1, C-447-3-1 and C-447-4-1.
- Condition 7 of each PTO specifies the daily natural gas fuel usage limitation to ensure compliance with the DEL. Therefore, condition 7 of each PTO is included

as condition 21 of the requirements for permit units C-447-1-1, C-447-3-1 and C-447-4-1.

- Condition 6 of each PTO requires the daily record keeping of natural gas consumption to ensure compliance with the DEL. Therefore, condition 6 of each PTO is included as condition 21 of the requirements for permit units C-447-1-1, C-447-3-1 and C-447-4-1.

b. 142 MMBtu/hr Nebraska Boiler (C-447-2-1)

Permit unit C-447-2-1 was subject to the NSR rule at the time the applicant applied for an ATC. ATC C-447-2-1 was issued by the District on July 17, 1997.

- Condition 1 of the ATC is now enforced by condition 22 of the facility-wide requirements (C-447-0-1).
- Condition 2 of the ATC is now enforced by condition 41 of the facility-wide requirements (C-447-0-1). The wording of the included condition is identical to the wording of the ATC condition. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 3 of the ATC is now enforced by condition 41 of the facility-wide requirements (C-447-0-1). This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 4 of the ATC is enforced by condition 18 of the requirements for permit unit C-447-2-2.
- Condition 5 of the ATC is enforced by condition 2 of the requirements for permit unit C-447-2-2.
- Condition 6 of the ATC was removed during implementation and issuance of the PTO. The condition required the operator to maintain records of daily fuel consumption. The permit has no limitation on fuel consumption or any other District requirement which would require records of fuel consumption be maintained. Therefore, the condition was removed. However, 40 CFR 60.49b paragraph d requires fuel consumption monitoring and the calculation of an annual capacity factor. These requirements are enforced by condition 12 of the requirements for permit unit C-447-2-2.

- Condition 7 of the ATC is enforced by conditions 4 and 7 of the requirements for permit unit C-447-2-2.
- Condition 8 of the ATC is enforced by conditions 4 and 7 of the requirements for permit unit C-447-2-2.
- Condition 9 of the ATC is enforced by conditions 4 and 7 of the requirements for permit unit C-447-2-2.
- Condition 10 of the ATC is enforced by conditions 4 and 7 of the requirements for permit unit C-447-2-2.
- Condition 11 of the ATC is enforced by condition 19 of the requirements for permit unit C-447-2-2.
- Condition 12 of the ATC is enforced by condition 20 of the requirements for permit unit C-447-2-2.
- Condition 13 of the ATC is enforced by condition 21 of the requirements for permit unit C-447-2-2.
- Condition 14 of the ATC is enforced by condition 22 of the requirements for permit unit C-447-2-2.
- Condition 15 of the ATC is enforced by condition 23 of the requirements for permit unit C-447-2-2.
- Condition 16 of the ATC is enforced by conditions 13 and 14 of the requirements for permit unit C-447-2-2.
- Condition 17 of the ATC is enforced by condition 24 of the requirements for permit unit C-447-2-2.

c. Diatomaceous Earth Silos (C-447-5-0 and 6-0)

Permit Units C-447-5-0 and C-447-6-0 were exempt from permit requirements prior to being permitted by the San Joaquin Valley Unified Air Pollution Control District. Therefore, no NSR requirements are applicable to these devices.

d. Diatomaceous Earth Silo (C-447-8-0)

Permit unit C-447-8-0 was subject to the NSR Rule at the time the applicant applied for an ATC. ATC C-447-8-0 was issued by the San Joaquin Valley Unified Air Pollution Control District on June 16, 1995.

- Condition 1 from the ATC is included as condition 2 of the requirements for permit unit C-447-8-1.
- Condition 2 from the ATC is included as condition 3 of the requirements for permit unit C-447-8-1. This condition is not federally enforceable because it is

based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.

- Condition 3 from the ATC is included as condition 22 of the facility wide requirements (C-447-0-1) This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 4 from the ATC is included as condition 4 of the requirements for permit unit C-447-8-1.
- Condition 5 from the ATC is not included on the requirements for permit unit C-447-8-1. This condition on the ATC was deleted as the system is closed and pneumatically driven with no fabric chutes.

d. Gasoline Storage Tank (C-447-9-0)

Permit unit C-447-9-0 was subject to the NSR Rule at the time the applicant applied for an ATC. ATC C-447-9-0 was issued by the San Joaquin Valley Unified Air Pollution Control District on July 1, 1997.

- Condition 1 from the ATC was included as condition 41 of the facility-wide requirements (C-447-0-1). The wording of the included condition is identical to the wording of the ATC condition. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 2 from the ATC is enforced by condition 1 of the requirements for permit unit C-447-9-1.
- Condition 3 from the ATC is enforced by condition 6 of the requirements for permit unit C-447-9-1.
- Condition 4 from the ATC is enforced by condition 2 of the requirements for permit unit C-447-9-1.

2. District Rule 1081

a. 142 MMBtu/hr Nebraska Boiler (C-447-2-1)

District Rule 1081 has been submitted to the EPA to replace Fresno County Rule 108.1 which is in the SIP. The following table lists all of the applicable requirements of District Rule

1081 and shows that District Rule 1081 is more stringent than Fresno County Rule 108.1. Compliance with District Rule 1081 will insure compliance with Fresno County Rule 108.1.

Table 1. Comparison of District Rule 1081 and Fresno County Rule 108.1

REQUIREMENTS	District Rule 1081	FCAPCD Rule 108.1
Upon request of the APCO, the source shall provide information. and records to enable the APCO to determine when a representative sample can be taken.	X	X
The facility shall collect, have collected or allow the APCO to collect, a source sample.	X	X
The source shall have District personnel present at a source test.	X	
The applicable test method, if not specified in the rule, shall be conducted in accordance with 40 CFR § 60, Appendix A.	X	
Test procedures: 1) arithmetic mean of three runs, 2) a scheduled source test may not be discontinued solely due to the failure to meet the applicable standard(s), and 3) arithmetic mean of two runs is acceptable if circumstances beyond owner or operator control occurs.	X	

Sections 3.0, 4.0, 5.0, 6.0, and 7.0 set forth requirements for sampling facilities, collection of samples, test methods, test procedures, and administrative requirements, respectively. These requirements are covered by permit conditions 7, 19, 20, and 21 of the requirements for permit unit C-447-2-2.

3. District Rule 2520, 9.4.2 and 9.5.2

a. 142 MMBtu/hr Nebraska Boiler (C-447-2-1)

Section 9.4.2 requires that periodic monitoring be performed if none is associated with a given emission limit to ensure compliance. This section allows that recordkeeping requirements may be sufficient to meet these requirements. Compliance with particulate matter (PM) and SO_x emission limits will be demonstrated by fuel sulfur content testing, monitoring, and recordkeeping required by permit conditions 3, 6, and 7 of the requirements for permit unit C-447-2-2.

Section 9.5.2 requires all records be maintained for at least five years. Permit condition 9 of the facility-wide requirements (C-447-0-1) requires that all records be maintained for at least five years.

4. District Rules 4201, 3.1 and 4301, 5.1

a. 142 MMBtu/hr Nebraska Boiler (C-447-2-1)

District Rule 4201 limits the emission of total suspended PM to 0.1 grain/dry standard cubic foot of gas. District Rule 4301 limits the emission of combustion contaminants in the form of PM to 0.1 grain per cubic foot of gas corrected to 12% carbon dioxide and to 10 lb/hr. Compliance with these limits can be shown as follows:

NATURAL GAS FIRED UNITS

$$\left(\frac{13.7\ lb\ \text{PM}}{10^6\ ft^3}\right)\left(\frac{1\ scf}{900\ Btu}\right)\left(\frac{142\ MMBtu}{hr}\right) = 2.2\frac{lb\ PM}{hr}$$

$$\left(\frac{13.7\ lb\ \text{PM}}{10^6\ ft^3}\right)\left(\frac{1\ MMBtu}{8710\ dscf}\right)\left(\frac{1\ scf}{900\ Btu}\right)\left(\frac{7000\ gr}{1\ lb}\right) = 0.01\frac{\text{grains}}{\text{dscf}}$$

where:

$13.7\ \frac{lb \cdot PM}{10^6 \cdot ft^3}$ = uncontrolled emission factor for natural gas fired boilers (AP42, Table 1.4-1)

$\frac{900\ Btu}{scf}$ = the minimum expected higher heating value of natural gas (AP42, 1.4.1)

$142\frac{MMBtu}{hr}$ = maximum heat input this boiler

$\frac{8710\ dscf}{MMBtu}$ = F factor, F_d, for natural gas (40CFR 60, App. A, Method. 19, Table 19-1)

$\frac{7000\ gr}{1\ lb}$ = conversion factor

The preceding calculations demonstrate that the emissions of PM during the firing of natural gas are well below the District Rule 4301, 5.3.1 limit of 10 lb/hr and the 4301, 5.1 limit of 0.1 gr/dscf at 12% CO_2 in the exhaust (see permit condition 1 of the requirements for permit unit C-447-2-2). An excess air concentration of 0% in the exhaust results in the maximum particulate matter concentration for any given emission rate. Therefore, the preceding calculations use an uncorrected F factor to represent worst-case emissions.

All of the units covered by this evaluation shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO_2, nor 10 lb/hr (condition 1 of the requirements for permit unit C-447-2-2). Compliance with District Rule 4301, 5.2.3 is ensured for all units fired on PUC-regulated natural gas. Therefore, no testing will be required for this unit. Permit conditions have been added to ensure compliance with the emission limits of these rules and associated monitoring and recordkeeping; conditions 1 and 2 of the requirements for permit unit C-447-2-2.

5. District Rule 4201

a. Diatomaceous Earth Storage Silos (C-447-5-0, 6-0, and 8-0)

This rule applies to emission sources that generate particulate matter. Section 3.1 requires that a person shall not release or discharge particulate matter in excess of 0.1 grain per cubic foot of gas at dry standard conditions. Condition 1 of the requirements for permit units C-447-5-1, 6-1, and 8-1 state this requirement.

Compliance with this Rule shall be demonstrated as follows.

The maximum daily PM emissions from a single diatomaceous earth silo are determined using AP42 emission factors.

There is no emissions data specifically on the transfer of diatomaceous earth. However, AP-42 Section 11.22 describes diatomite as sedimentary rock consisting mainly of

amorphous hydrated silica. Therefore, an emission factor shall be used for sand and gravel processing (AP-42 Section 11.19). The emission factor for uncontrolled transfer of dry aggregate is 0.0014 lb PM_{10}/ton. This emission factor can be multiplied by 2 to account for total particulate matter.

Typically, a silo will operate 180 minutes in 24 hours. In this period 40 tons of diatomite will be transferred into the silo. The Potential Emissions (PE) are calculated as follows:

$$PEsilo = \frac{0.0014 \cdot lbPM}{ton} \frac{2 \cdot lbPM}{lbPM_{10}} \frac{40 \cdot ton}{180 \min} \frac{60 \min}{hr} (1 - 0.95) = 0.0019 \text{ lb PM/hr}$$

where, 0.95 represents the baghouse control efficiency (see District review of project 950256 dated 4/25/94).

The unit operates 3 hours per day, therefore

0.0019 lb PM/hr * 3 hr/day = 0.006 lb PM/day

$$\frac{0.006 \cdot lbPM}{day} \frac{7000 gr}{lb} \frac{\min}{425 ft^3} \frac{day}{180 \min} = 0.0005 gr/ft^3$$

where,

0.006 lb PM/day = maximum daily PM emissions for 40 tons of storage
425 ft^3/min = maximum rating of system blower
7000 gr/lb = conversion factor
180 min/day = conversion factor for 3 hours per day of loading

The preceding calculations demonstrate that the emissions of PM during the loading of the diatomaceous earth storage silos are significantly lower than the District Rule 4201 limit of 0.1 grain/dscf. Therefore, no testing will be required for this unit.

6. District Rule 4202

a. Diatomaceous Earth Storage Silos (C-447-5-0, 6-0, and 8-0)

This rule applies to any source operation which emits particulate matter. Rule 4202 contains the same requirements

as FCAPCD Rule 405 as is shown in the following table. The compliance demonstration which follows the table, demonstrates compliance for both District Rule 4202 and FCAPCD Rule 405.

Table 2. Comparison of District Rule 4202 and Fresno County Rule 405

Requirement	District	FCAPCD
A person shall not discharge into the atmosphere particulate matter in excess of an exponential equation that is defined in each of the rules. The equation is identical for each of the rules.	X	X

The maximum allowable emission rate is given as a function of the process weight rate in Section 4 of Rule 4202. The function is shown below.

$$E = 3.59\ P^{0.62}$$

where: E = emission rate of particulate matter (lb/hr)
P = process weight rate of earth (ton/hr)

The maximum allowable emission rate can be calculated from the potential diatomaceous earth usage that was reported by the facility. The facility reported a possible process rate of 40 tons of diatomaceous earth per 3 hour day (13.3 ton/hr). Using this process weight in the above equation yields a maximum emission of 17.86 lb PM/hr.

The emission factor for particulate matter from the baghouse on the diatomacious earth storage and transfer system was calculated to be 0.0028 pounds per ton of material processed. Using this emission factor and the yearly process weight for diatomaceous earth yields the following emission rate of 0.0019 lb PM/hr

The particulate matter emission rate is less than 1% of the maximum allowable emission rate of 17.86 pounds per hour. These calculations show that compliance with this rule is expected.

7. 40 CFR 60.40b

a. 142 MMBtu/hr Nebraska Boiler (C-447-2-1)

This section of the CFR applies to this unit because it is a steam generating unit that was constructed after June 19, 1984, and has a heat input capacity greater than 100 million Btu per hour. Any section or paragraph not mentioned in the discussion below does not apply to this emission unit.

Section 60.44b paragraph a requires that the unit emit no more than 0.10 pounds of NO_x per million Btu. This limit is less stringent than the NSR Rule limitations imposed on the facility. Condition 8 of the requirements for permit unit C-447-2-2 ensures compliance with this requirement.

Paragraph h requires that that the NO_x standards be followed at all times, including periods of startup, shutdown, and malfunction. Condition 8 of the requirements for permit unit C-447-2-2 ensures compliance with this requirement.

Paragraph i requires that compliance with the NO_x standards be determined on a 30 day rolling average. Condition 8 of the requirements for permit unit C-447-2-2 ensures compliance with this requirement.

Section 60.46b paragraph c requires that performance testing under this section be used. Conditions 4, 7, and 24 of the requirements for permit unit C-447-2-2 ensures compliance with this requirement.

Paragraph e requires that a performance test as required under Section 60.8 be used to determined compliance with the emission limits for NO_x. Subparagraphs 1-5 delineate specifics as to how the performance test is to be completed. Conditions 4, 7, and 24 of the requirements for permit unit C-447-2-2 ensures compliance with this requirement.

Section 60.48b paragraph b requires that the owner shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system. Condition 22 of the requirements for permit unit C-447-2-2 ensures compliance with this requirement.

Paragraph c requires the CEMS to be operated at all times it is operational and that the data be recorded. Condition 22 of

the requirements for permit unit C-447-2-2 ensures compliance with this requirement.

Paragraph d states the manner in which the 30 day rolling averages be calculated and stated that the data be expressed in units of either ng/J or lb/million Btu. Compliance with this requirement is ensured by conditions 9 and 22 of the requirements for permit unit C-447-2-2.

Paragraph e and subparagraphs 1-2 require that the procedures under Section 60.13 be followed for installation, evaluation, and operation of the continuous monitoring systems. Compliance with this requirement is ensured by condition 10 of the requirements for permit unit C-447-2-2.

Paragraph f requires that when the CEMS data is not available due to breakdown or other interruption, Method 7, 7A, or other approved reference methods to provide emission data be used to determine compliance with the nitrogen oxides emission limits. Compliance with this requirement is ensured by condition 11 of the requirements for permit unit C-447-2-2.

Paragraph g applies only when the unit is first installed.

Section 60.49b paragraph a applies only when the unit is first installed.

Paragraph b requires the owner to submit the initial CEMS performance test data to the administrator. This requirements has been satisfied.

Paragraph c applies only when the unit is first installed.

Paragraph d requires that the owner record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor for each calendar quarter. Compliance with this requirement is ensured by condition 12 of the requirements for permit unit C-447-2-2.

Paragraph g requires that the following records be kept for each steam generating unit operating day:

1. Calendar date.
2. Average hourly NO_x emission rate.
3. Average 30-day emission rate for preceding 30 operating days.

4. Identification of daily NO_x limit exceedances including reason for exceedance and the corrective actions taken.
5. Identification of daily CEMS interruptions including reason for interruption and the corrective actions taken.
6. Identification of data exclusions and the reasons for the exclusion.
7. Identification of "F" factor used for calculations.
8. Identification of times that the pollutant concentration exceeded the full span of the CEMS.
9. Description of modifications to the CEMS.
10. Results of daily CEMS drift tests and other tests required under appendix F, Procedure 1.

Compliance with this requirement is ensured by condition 13 of the requirements for permit unit C-447-2-2.

Paragraph i requires that the owner report the information required by paragraph g in a quarterly report within 30 days of the end of each calendar quarter. Compliance with this requirement is ensured by condition 23 of the requirements for permit unit C-447-2-2.

Paragraph h requires that the owner submit quarterly excess emission reports for any calendar quarter during which there are excess emissions. It also requires semiannual reports stating that there have been no excess emissions during periods when there have been no excess emissions. Compliance with this requirement is ensured by condition 14 of the requirements for permit unit C-447-2-2.

Paragraph o requires that all records required under this section shall be maintained by the owner or operator for a period of 2 years following the date of such record. Compliance with this requirement is ensured by condition 9 of the facility-wide requirements (C-447-0-1) which requires the operator to maintain all records for at least five years.

8. 40 CFR Part 68 - Chemical Accident Prevention Provisions

The requirements of this provision mandates that the subject facility submit to the proper authority a Risk Management Plan. Condition 40 of the facility wide requirements (C-447-0-1) requires compliance with this provision.

C. Streamlining of Multiple Applicable Requirements

Section IV of template SJV-BSG-4-0 contains compliance demonstrations for streamlined requirements of conditions for the boilers permitted by PTOs C-447-1-0, 3-0, and 4-0.

The following compliance demonstration for streamlined requirements was proposed by the applicant in the Title V application process.

1. District Rule 4301, 5.2.2; 4305, 5.1.1 & 5.1.2; and 4351, 5.2.2 & 5.4

a. 142 MMBtu/hr Nebraska Boiler (C-447-2-1)

These rules contain limits on emissions of oxides of nitrogen (NO_X). The following analysis shows that the NO_x requirements of District Rule 4305 are more stringent than District Rule 4301 and 4351. Streamlining procedures, as documented in the following steps, are used to substitute the proposed set of requirements for the otherwise applicable requirements.

Step 1. Side-by-side Comparison of Applicable Requirements:

NO_X				
CITATION:	**District Rule 4301**	**District Rule 4305**	**District Rule 4351**	**Proposed Requirements**
WORK PRACTICE STANDARDS	None	None	None	None
EMISSION LIMIT:	140 lb NO_X/hr [4301, 5.2.2]	A) Gaseous fuel fired: 0.036 lb NO_X/MMBtu or 30 ppmv B) Liquid fuel fired: 0.052 lb NO_X/MMBtu or 40 ppmv C) Combination of fuels: heat input weighted average of limits [4305, 5.1]	A) Gaseous fuel fired: 0.036 lb NO_X/MMBtu or 30 ppmv [4351, 5.2.2.1] B) Liquid fuel fired: 0.052 lb NO_X/MMBtu or 40 ppmv [4351, 5.2.2.2] C) Combination of fuels: liquid NO_x limit provided gaseous content < 55% [4351, 5.4]	A) Gaseous fuel fired: 0.036 lb NO_X/MMBtu or 30 ppmv B) Liquid fuel fired: 0.052 lb NO_X/MMBtu or 40 ppmv C) Combination of fuels: lower NO_x limit of the 2 fuels being fired simultaneously
MONITORING:	None	Monitor units that simultaneously fire combinations of different fuels with totalizing mass or volumetric flow rate meters. [4305, 5.3.1]	Monitor units that simultaneously fire combinations of different fuels with totalizing mass or volumetric flow rate meters. [4351, 5.6.1]	Monitor units that simultaneously fire combinations of different fuels with totalizing mass or volumetric flow rate meters. [4305, 5.3.1 and/or 4351, 5.6.1]

RECORD-KEEPING:	None	Maintain records for two calendar years [4305, 6.1.2].	Monitor and record the hhv and cumulative annual use of each fuel for each unit Maintain records for two calendar years [4351, 6.1]	Monitor and record the hhv and cumulative annual use of each fuel for each unit. [4351, 6.1] Maintain records for five calendar years. [2520, 9.5.2]
REPORTING:	None	None	None	None
TEST METHODS:	Oxides of nitrogen concentration - ARB Method 100. Stack gas velocity - EPA Method 2. Stack gas moisture - EPA Method 4. [4301, 6.0]	Fuel hhv shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid fuels or by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. Oxides of nitrogen (ppmv) - EPA Method 7E, or ARB Method 100. Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100. NOx Emission Rate (Heat Input Basis) - EPA Method 19. Stack gas velocities - EPA Method 2. Stack gas moisture content - EPA Method 4. [4305, 6.2]	Fuel hhv shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid fuels or by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. Oxides of nitrogen (ppmv) - EPA Method 7E, or ARB Method 100. Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100. NOx Emission Rate (Heat Input Basis) - EPA Method 19. Stack gas velocities - EPA Method 2. Stack gas moisture content - EPA Method 4. [4351, 6.2]	Fuel hhv shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid fuels or by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. Oxides of nitrogen (ppmv) - EPA Method 7E, or ARB Method 100. Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100. NOx Emission Rate (Heat Input Basis) - EPA Method 19. Stack gas velocities - EPA Method 2. Stack gas moisture content - EPA Method 4. [4305, 6.2]

Step 2. Select most stringent emission limit or performance standard:

The proposed NO_x emission limit of 0.036 lb NO_x/MMBtu or 30 ppmv (corrected to 3% O_2) for gaseous fuel fired boilers and steam generators is more stringent than that imposed by District Rule 4301, 4305 and 4351, as demonstrated below. (all limitations are converted to a common unit of measure of ppmv):

Compliance with NO_x limit-District Rule 4305, 5.1:

This rule requires NO_x emissions to be limited to 0.036 lb NO_x/MMBtu or 30 ppmv (corrected to 3% O_2) for gaseous fuel fired boilers and steam generators.

This limit is the same as the proposed limit for this boiler.

Compliance with NO_x limit-District Rule 4351, 5.2.2

This rule requires NO_x emissions to be limited to 0.036 lb NO_x/MMBtu or 30 ppmv (corrected to 3% O_2) for gaseous fuel fired boilers and steam generators.

This limit is the same as the proposed limit for this boiler.

Compliance with NO_X limit-District Rule 4301, 5.2.1

This rule requires NO_x emissions be limited to 140 lb/hr (calculated as NO_2). Converting to common units of measure:

NATURAL GAS FIRED:

$$\frac{\left(140\frac{lb\cdot NO_X}{hr}\right)\left(23.7\frac{L}{gmol}\right)\left(0.035315\frac{ft^3}{L}\right)\left(453.59\frac{g}{lb}\right)}{\left(8710\frac{dscf}{MMBtu}\right)\left(142\frac{MMBtu}{hr}\right)\left(46.01\frac{g\cdot NO_2}{gmol}\right)} = 0.000934 = 934\ ppmv$$

where:

$140\frac{lb\cdot NO_X}{hr}$ = NO_X emission rate limit per District Rule 4301, 5.2.2

$23.7\frac{L}{gmol} = \frac{(288.71K)\left(22.4\frac{L}{gmol}\right)}{273.15K}$ = molar volume of an ideal gas corrected to District standard conditions (60° F, 14.7 psi) per Charles' Law

$0.035315\frac{ft^3}{L}$ = conversion factor

$453.59\frac{g}{lb}$ = conversion factor

$8710\frac{dscf}{MMBtu}$ = F_d, for natural gas (40CFR 60, App. A, Meth. 19, Table 19-1)

$142\frac{MMBtu}{hr}$ = maximum heat input this boiler

$46.01\frac{g\cdot NO_2}{gmol}$ = molecular weight, NO_2

The following table is a summary of emission limitations in common units of measure as suggested by White Paper #2:

Proposed Limitation (ppmv)		Rule 4301 (ppmv)	
GAS FIRED	OIL FIRED	GAS FIRED	OIL FIRED
30	40	1330	1260

The proposed requirements are more stringent than the otherwise applicable requirements.

Step 3. Conditions ensuring compliance with applicable requirements

The unit qualifying to use this evaluation shall be required by permit condition to comply with the streamlined nitrogen oxides emission limits and associated monitoring, recordkeeping, and testing. See permit conditions 3, 4, 5, 7, 17, and 18 of the requirements for permit unit C-447-2-2.

Step 4. Certify compliance

The applicant is certifying compliance with all conditions required as part of the application.

Step 5. Compliance schedule for new monitoring requirements

Not applicable.

2. District Rule 4301, 5.2.1; District Rule 4801; and Fresno County Rule 406

a. 142 MMBtu/hr Nebraska Boiler (C-447-2-1)

These rules contain limits on emissions of sulfur compounds. The following analysis shows that the proposed requirement to burn PUC-regulated natural gas is more stringent than District Rule 4301, District Rule 4801, and Fresno County Rule 406. Streamlining procedures, as documented in the following steps, are utilized to substitute the proposed set of requirements for the otherwise applicable requirements.

Step 1. Side-by-side comparison of emission limits:

SO_X (natural gas firing only)

CITATION:	District Rule 4301	Fresno County Rule 406 and District Rule 4801	Proposed Requirements
WORK PRACTICE STANDARDS:	none	none	Use of PUC-regulated natural gas with a sulfur content of ≤ 0.017% by weight. [Public Utilities Code General Order 58-B]
EMISSION LIMIT:	200 lb/hr of sulfur compounds, calculated as SO_2 (5.2.1)	Two-tenths (0.2) percent by volume calculated as sulfur dioxide (SO_2), on a dry basis averaged over 15 consecutive minutes	none
MONITORING:	none	none	Operator shall maintain copies of natural gas invoices. [District Rule 2520, 9.4.2]
RECORDKEEPING:	none	none	Operator shall maintain records for five years. [District Rule 2520, 9.5.2]
REPORTING:	none	none	none
TEST METHODS:	ARB Method 100 (6.2) EPA Method 8 or ARB Method 8 (6.4) EPA Method 2 (6.5) EPA Method 4 (6.6)	EPA Method 8 and ARB Method 1-100 (Continuous Stack Sampling)	none

Step 2. Select most stringent emission limit or performance standard:

District Rule 4301 limits the emission of sulfur compounds to 200 lb/hr calculated as SO_2. This natural gas fired unit is limited to the combustion of PUC-regulated natural gas. The following demonstration illustrates, by conversion to similar units, that the proposed limitation is more stringent than District Rule 4301, 5.2.1.

$$\frac{\left(100\frac{lb\ S}{hr}\right)\left(\frac{453.59\ g\ CH_4}{lb\ CH_4}\right)\left(\frac{23.7\ L\ CH_4}{gmol\ CH_4}\right)\left(\frac{0.00105\ MMBtu}{scf\ CH_4}\right)}{\left(\frac{16.04\ g\ CH_4}{gmol\ CH_4}\right)\left(\frac{28.317\ L\ CH_4}{scf\ CH_4}\right)\left(\frac{142\ MMBtu}{hr}\right)} = \frac{0.018\ lb\ S}{lb\ CH_4}$$

where:

$100\frac{lb\ S}{hr} = 200\frac{lb\ SO_X}{hr}$ = District Rule 4301, 5.2.1 emission limit

$$\frac{453.59\ g\ CH_4}{lb\ CH_4} = \text{ conversion factor}$$

$$23.7\frac{L}{gmol} = \frac{(288.71K)\left(22.4\frac{L}{gmol}\right)}{273.15K} = \text{molar volume of an ideal gas}$$

corrected to District standard conditions (60° F, 14.7 psi) per Charles' Law

$$\frac{0.00105\ MMBtu}{scf\ CH_4} = \text{heating value for natural gas (AP42, Appendix A)}$$

$$\frac{16.04\ g\ CH_4}{gmol\ CH_4} = \text{molecular weight of natural or produced gas}$$

$$\frac{28.317\ L\ CH_4}{scf\ CH_4} = \text{conversion factor}$$

$$142\frac{MMBtu}{hr} = \text{ maximum heat input for this boiler.}$$

The preceding analysis shows that the maximum Rule 4301 allowable emission of sulfur compounds at the maximum heat input of this boiler is 0.018 lb S/lb CH_4 which is 1.8% by weight. This demonstrates that the proposed fuel sulfur limit, 0.017% by weight (the maximum quantity of sulfur allowed in PUC quality natural gas) is clearly more stringent.

Fresno County Rule 406 and District Rule 4801 limit the emission of sulfur compounds to 0.2% by volume (2000 ppmv) calculated as SO_2, on a dry basis averaged over 15 minutes. This gas-firing unit is limited to the combustion of PUC-regulated natural gas. The following demonstration illustrates, by stoichiometric mass balance taking CH_4 as typical for natural gas, that the proposed limitation is more stringent than Fresno County Rule 406 and District Rule 4801.

Assuming 0% excess air in the exhaust stream that corresponds with maximum SO_X emissions concentration the combustion equation is (neglecting NO_X and SO_X relative to SO_2 in the exhaust):

$$CH_4 + 2O_2 + 7.56N_2 + YS \quad \rightarrow \quad CO_2 + 2\ H_2O + YSO_2 + 7.56N_2$$

where:
Y = moles of sulfur in the fuel.

Solving an expression for the fraction of SO_2 in the dry exhaust by volume gives:

$$\frac{Y}{1+7.56} = 0.002 \quad \Rightarrow \quad Y = 0.01712$$

where:
Y = mole fraction of S per mole of CH_4 combusted
1 = one mole of CO_2
7.56 = number of moles of N_2
0.002 = 0.2% by volume limit per County Rules 404, 406, and 407

Use Y to calculate the weight fraction of S in one mole of CH_4:

$$\frac{(.001712)(32.06)}{(16.04)+(.001712)(32.06)} = 0.033 \quad \Rightarrow \quad 3.3\%$$ S by weight in the fuel.

where:
32.06 = molecular weight of sulfur (S)
16.04 = molecular weight of CH_4
0.033 = fraction of S by weight in the fuel

The preceding calculation shows that an exhaust concentration of 0.2% by volume corresponds to a fuel sulfur content by weight of 3.3%. Because the fuel is the only source of sulfur, the weight percent of sulfur in the fuel is proportional to the exhaust SO_2 concentration; therefore the exhaust concentration associated with combustion of fuel with 0.017% sulfur is 0.001%.

The preceding analysis shows that the Fresno County Rule 406 and District Rule 4801 maximum allowable emission of sulfur compounds occurs at 3.3% weight sulfur content. Clearly, the proposed fuel sulfur content limit of 0.017% weight sulfur content is approximately 200 times more stringent than maximum allowable under ideal conditions.

Step 3. Conditions ensuring compliance with applicable requirements.

Natural gas fired units qualifying to use this evaluation will be required by condition 2 of the requirements for permit unit C-447-2-2 to fire exclusively on PUC-regulated natural gas. Associated monitoring and recordkeeping requirements further ensure compliance (see condition 6 of the requirements for permit unit C-447-2-2).

Step 4. Certify compliance

The applicant certifies compliance with all conditions required as part of the Title V application.

Step 5. Compliance schedule for new monitoring requirements

Not applicable.

X. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Title V permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

A. Requirements Addressed by Model General Permit Templates

By submitting model general permit template SJV-UM-0-0, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shield as granted in the model general permit template is included as conditions 38 and 39 of the facility wide requirements (C-477-0-1).

By submitting model general permit template SJV-BSG-4-0, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shield as granted in the model general permit template is included as conditions 17 and 18 of the requirements for permit units C-477-1-1, 3-1, and 4-1.

B. Requirements not Addressed by Model General Permit Templates

1. Fresno County APCD Rules 108.1, 404, 406, and 408

These old county rules have been subsumed by current SIP and EPA approved District rules. Compliance with these rules is shown through compliance with the District rules as addressed in Section IX of this document. Therefore, a permit shield is being granted for this requirement in condition 15 of the requirements for permit unit C-477-2-2.

2. District Rule 1081

Compliance with this requirement was addressed in Section IX of this document and is ensured by conditions 19, 20, and 21 of the requirements for permit unit C-477-2-2. Therefore, a permit shield is being granted for this requirement in condition 16 of the requirements for permit unit C-477-2-1.

3. District Rule 4201

Compliance with this requirement was addressed in Section IX of this document and is ensured by condition 1 of the requirements for permit unit C-477-2-2. Therefore, a permit shield is being granted for this requirement in condition 16 of the requirements for permit unit C-477-2-2.

4. District Rule 4202

Compliance with this requirement was addressed in Section IX of this document and is ensured by condition 18 of the requirements for permit unit C-477-2-2. Therefore, a permit shield is being granted for this requirement in condition 16 of the requirements for permit unit C-477-2-2.

5. District Rule 4301

Compliance with this requirement was addressed in Section IX of this document and is ensured by conditions 1, 2, and 3 of the requirements for permit unit C-477-2-2. Therefore, a permit shield is being granted for this requirement in condition 16 of the requirements for permit unit C-477-2-2.

6. District Rule 4305

Compliance with this requirement was addressed in Section IX of this document and is ensured by conditions 3, 4, 5, 7, 17, and 18 of the

requirements for permit unit C-477-2-2. Therefore, a permit shield is being granted for this requirement in condition 16 of the requirements for permit unit C-477-2-2.

7. District Rule 4351

Compliance with this requirement was addressed in Section IX of this document and is ensured by conditions 3, 4, 5, and 18 of the requirements for permit unit C-477-2-2. Therefore, a permit shield is being granted for this requirement in condition 16 of the requirements for permit unit C-477-2-2.

XI. PERMIT CONDITIONS

See proposed permit conditions starting on the next page.

EPA COMMENTS / DISTRICT RESPONSE

The EPA's comment regarding the proposed Title V Operating Permit for E and J Gallo Winery (District facility C-447) is encapsulated below followed by the District's response. A copy of the EPA's 9/19/97 letter is available at the District.

OBJECTION ISSUES

1. EPA COMMENT

The representative source testing provisions for the three Gallo boilers (units 1, 3, and 4) are based on template SJV-BSG-4-0. As EPA noted in our April 16, 1997 letter to the District, the representative source testing provisions in the boiler template were not included in the proposed templates submitted to EPA for review. In addition, the April 16 letter noted several problems with the representative source testing language, including that the definition of "similar units" is vague, and specified that additional restrictions in the criteria would be necessary before EPA could allow the use of "representative" source testing in lieu of testing individual units. These restrictions are necessary in order that "representative" engines are truly similar in terms of size of units, level of emissions from the units, and maintenance requirements. Therefore, this permit may not be issued with the current "representative" source testing condition. We recommend that the District delete these provisions or add the restrictions identified in our April 16, 1997 letter.

DISTRICT RESPONSE

The District agrees to add conditions to the Title V permit which better identify representative source testing requirements. The following conditions will be added to the proposed operating permit:

> {540}Annual test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2 and 4351, 6.3]

> {541}The following conditions must be met for representative unit(s) to be used to demonstrate compliance for NOx limits for a group of units: 1) all

units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.4.2 and 4305, 6.3.2]

{542}All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2]

{543}All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fueltype (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.4.2 and 4305, 6.3.2]

{544}The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire groupwill have been tested at least once. [District Rule 2520, 9.4.2]

2. EPA COMMENT

The final conditions in the sub-section for each boiler contain a condition that states "Compliance testing shall be conducted at a frequency determined by the Control Officer." This condition is not acceptable because it does not assure that testing will be sufficient to assure compliance with all applicable requirements. District staff have agreed to remove this condition. The permit shield from District Rule 1081 may also be inappropriate if specific compliance testing requirements are not set out.

DISTRICT RESPONSE

The District does agree to remove the identified condition. The condition will be replaced with a condition requiring source testing at specific intervals. District Rule 4305 requirements will be used to establish the source testing frequency. Because

specific compliance testing is being required, the District maintains the validity of granting a permit shield from District Rule 1081.

3. EPA COMMENT

The permit must contain a method for determining compliance with the daily mass emission limits for NOx, CO, VOC and PM10 for the 62 mmbtu/hr and the two 75 mmbtu/hr boilers. While continuous emission monitoring would provide the most accurate method for determining compliance, monitoring could also be based on an emission factor developed through source testing. To avoid 24-hour source testing, we suggest that the District require that the three hourly stack tests required by the District's source test rule be conducted at maximum capacity, averaged, and then multiplied by 24 to determine compliance with the daily limit.

In addition, the CEMS reports for the 142 mmbtu/hour unit should be used to calculate compliance with the 24-hour emission limits for that unit. Therefore, the District should require that the CEMS reporting include the daily emission rate.

DISTRICT RESPONSE

The current proposed operating permit requires the facility to perform source testing for NO_x and CO on an annual basis. These tests will be three hourly stack tests which are averaged and then multiplied by 24 to determine compliance with the daily limit. The source tests are not required to be done at maximum capacity, as this could unduely disrupt operations at the facility.

Source testing for VOC and PM_{10} will not be required. The District believes that the emission factors found in AP-42 are resonable and accurate enough for compliance. Additionally, due to the small amounts of VOC and PM_{10} being emitted from the boilers, source testing would be an unjustifiable expense.

The District agrees that the CEMS reporting should include the daily emission rate. Therefore, wording will be added to identify this reporting requirement in the proposed operating permit.

4. EPA COMMENT

The boilers, which comprise the majority of the emission units and emissions at the source, have a potential to emit of 53.5 tpy NOx and 219.9 tpy CO. The permit currently does not contain periodic monitoring requirements to ensure that the emission controls for the boilers are continuously operated. District Rule 4305 requires that the company develop a monitoring plan, and this plan may be adequate to satisfy periodic monitoring requirements. In addition, each boiler is equipped with flue gas recirculation and most are equipped with oxygen monitors. Therefore, we recommend that the District use these monitors to determine an

acceptable range of operating parameters that is specified in the permits and require monitoring for these parameters.

DISTRICT RESPONSE

The District believes conditions which limit the facilities operations, beyond the requirements of the original ATC, are of an NSR type action. District Rule 2520 states that a purpose of the rule is to provide for an administrative mechanism for incorporating requirements authorized by preconstruction permits issued under District Rule 2201 (New and Modified Stationary Source Review) in a part 70 permit. Therefore, Title V operating permit issuance is specifically exempted from any NSR action or revision. This type of change would undermine the local permitting agencies authority. Therefore, the District feels that placing any additional restrictions on the operation of the boilers, would be inappropriate.

COMMENTS

1. EPA COMMENT

We agree with the District that certain conditions from the permit template, which allow combustion of diesel fuel, are not applicable to this source, since the source may only combust natural gas. While the permit limits the source to combusting only natural gas, the language from the template contains contradictory language (i.e. Condition B.2. states “Unit shall be fired on PUC-regulated natural gas or on diesel fuel...”) which may be confusing. We strongly encourage the District to delete any conditions that are not applicable to this source in order to avoid confusion.

DISTRICT RESPONSE

The facility has requested to use Model General Permit Template SJV-BSG-04. The District cannot change the conditions on a duely noticed and approved template. The proposed changes could only be made by creating a natural gas only template and restarting the approval process. Therefore, the suggested clarification cannot be made.

2. EPA COMMENT

The permit does not contain conditions for determining whether the four boilers are in compliance with their daily PM10 and VOC limits and opacity limit. Because the units are limited to firing on natural gas, then the District can likely demonstrate that current permit conditions will assure compliance. If not, the District must provide monitoring to assure compliance with these requirements.

DISTRICT RESPONSE

Engineering evaluations were done by Fresno County APCD prior to issuing the original ATCs. The DELs were established pursuant to conservative calculations made there in. Additionally, annual source testing will be required for the three (3)

smaller boilers, and CEMs are installed and being tested on the large boiler. The District believes the current conditions are sufficient to maintain compliance.

3. EPA COMMENT

EPA recommends that in the case where the permit allows for reducing the frequency of source testing after two tests demonstrate compliance, that the condition should also require the source to return to more frequent testing if noncompliance is found during a test. As written, the permit currently allows the source to test a boiler every three years after it passes two stack tests, even if the boiler later violates its emission limit.

DISTRICT RESPONSE

The District agrees that additional wording should be added to require the facility to return to more frequent source testing if found in violation. Therefore, wording shall be added to the operating permit which requires the resumption of more frequent testing if any such test fails to show compliance.

4. EPA COMMENT

E and J Gallo's permit application states that the source was not in compliance with NSPS monitoring requirements at the time the application was submitted (January 17, 1997). Because the proposed permit does not include a compliance schedule for these requirements, we assume that the District has determined that E and J Gallo has corrected this non-compliance. We recommend that the District explain the source's compliance status in the District's response to our comments. The proposed permit must ensure compliance with all NSPS requirements, and must include a compliance schedule if E and J Gallo Winery is not in full compliance.

DISTRICT RESPONSE

E & J Gallo has come into compliance with the NSPS monitoring requirements since the time of application. Compliance with 40 CFR 60 subpart Db has been achieved by the submitting an application to instal CEMs on the 142 MMBtu/hr boiler. ATC C-447-2-1 has been issued and the CEMS have been constructed. A Permit to Operate shall be implemented upon receipt and review of the RATA testing results by the District.

5. EPA COMMENT

The permit does not specify the relevant averaging times for the pollutant concentration limits in the permit. Therefore, an appropriate averaging time should be added to the permit that is consistent with the compliance method. Examples of appropriate averaging times would be the average of three one hour source tests or, for a source with continuous emission monitoring (CEMS), hourly, or any shorter averaging times as specified in State or District rules or policy.

DISTRICT RESPONSE
Please see the District response to Objection #3.

PUBLIC COMMENTS / DISTRICT RESPONSE

The Public's comments regarding the proposed Title V Operating Permit for E and J Gallo Winery (District facility C-447) is encapsulated below followed by the District's response. A copy of the submitted letters is available at the District.

COMMENTS

1. PUBLIC COMMENT

Condition #10 for C-447-2-2 is redundant with Facility-wide Condition #9; both conditions state the requirement stemming from District Rule 2520 9.5.2, to retain records of all required monitoring for five years. Please remove Condition #10 for C-447-2-2.

DISTRICT RESPONSE

The District agrees, and the condition shall be removed from the equipment specific requirements of C-447-2-2.

2. PUBLIC COMMENT

Please clarify Condition #6 for C-447-2-2 to read: "Operator shall perform annual source testing to demonstrate compliance with the 0.036 lb/MMBtu NOx limit according to EPA Method 7E (or ARB Method 100)." (the rest of the condition the same as stated in the proposed permit).

DISTRICT RESPONSE

The District agrees to add the requested language to the condition.

3. PUBLIC COMMENT

Please add the following clarifying condition to permit C-447-2-2:

"All emissions measurements used for determining compliance with the 0.036 lb/MMBtu NOx limit shall be made with the unit operating at normal firing rate, air-to-fuel ratio, and fuel quality. No determination of compliance with the NOx limit shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for thirty minutes or longer, or during start-up, shut-down, or breakdown. [District Rule 4305, 5.5.2]"

This condition was proposed as part of the Title V application for Facility C-447.

DISTRICT RESPONSE
The District agrees to add the requested permit condition.

4. PUBLIC COMMENT
Please clarify Condition #18 for C-447-2-2 to read: "Upon request of the EPA or the District, compliance with the 0.1 lb/MMBtu NOx limit shall be determined through the use of a 30-day rolling average of the NOx concentration calculated from the CEMS. [40 CFR 60.46b paragraph c and e]"

DISTRICT RESPONSE
The District agrees that the language of condition 18 should be rewritten to provide greater clarity. However, the suggested language is very similar to that of condition 17. Therefore, condition 18 shall be removed and additional wording shall be added to condition 17 to assure compliance with 40 CFR 60.46b paragraph e.

5. PUBLIC COMMENT
We request a permit shield from the requirements of 40 CFR 60 Subpart Db be added to the permit conditions for permit unit C-447-2-2. Conditions proposed for the Title V permit assure compliance with the applicable requirements of this regulation.

DISTRICT RESPONSE
The proposed permit conditions ensure compliance with 40 CFR 60 subpart Db, therefore the requested permit shield shall be added to the permit.

6. PUBLIC COMMENT
Please add to the Title V permit the federally enforceable conditions for permit #C-447-9-0. The application to permit this existing small aboveground storage tank was submitted to the District after the complete Title V permit application.

DISTRICT RESPONSE
The District will modify the proposed operating permit and associated engineering evaluation to include the newly permitted unit.